Serial No. 10/764,295
Atty. Doc. No. 2001P07053WOUS

Amendments To the Claims:

Please amend the claims as shown.

1. (currently amended) A method for evaluation of a rotating object, the method comprising:

providing a first operating parameter that is an actual rotational speed value;

automatically recording a frequency spectrum of the object to be tested by measuring means, wherein the frequency spectrum has first amplitude values which depend on first frequency values;

automatically using the first frequency values of the frequency spectrum for normalization in relation to the actual rotational speed value;

automatically forming an alarm curve with second amplitude values which depend on second frequency values;

automatically using the second frequency values of the alarm curve for normalization in relation to the actual rotational speed value;

automatically changing the second amplitude values of the alarm curve according to a second operating parameter, wherein the operating states of the object to be tested are characterized by the second operating parameter which is proportional to a load of the object to be tested, and wherein the operating states of the object to be tested are further characterized by a third operating parameter which is proportional to a temperature of the object to be tested;

automatically comparing the first amplitude values of the normalized frequency spectrum with the second amplitude values of the alarm curve which is changed according to the second operating parameter, and the third operating parameter; and

using a result of the comparison to evaluate the object to be tested.

Claims 2 – 3 (cancelled)

4. (previously presented) A method according to claim 1, wherein the second amplitude values of the alarm curve are changed according to a function of the operating parameters.

5. (previously presented) A method according to claim 1, wherein the alarm curve which is normalized and changed according to the operating parameters forms an envelope curve over the normalized frequency spectrum of the object to be tested in a fault-free normal condition, wherein an alarm is generated if at least one amplitude value of the normalized frequency spectrum lies outside the envelope curve.

6. (previously presented) A method according to claim 1, wherein the measuring means are fashioned as vibro-acoustic measuring means.

7. (currently amended) A method according to ~~C~~claim 1 for the use of a spectral evaluation of a machine.

8. (currently amended) A method according to ~~C~~claim 1 for the use of monitoring the vibration of vehicle components.

Claim 9 (cancelled)

10. (currently amended) A method according to ~~C~~claim 4, wherein the function of the operating parameters is specified by a user.

Claims 11-12 (cancelled)

13. (currently amended) A method according to claim ~~2~~1, wherein the alarm curve which is normalized and changed according to the operating parameters forms an envelope curve over the normalized frequency spectrum of the object to be tested in a fault-free normal condition, wherein an alarm is generated if at least one amplitude value of the normalized frequency spectrum lies outside the envelope curve.

Claim 14 (cancelled)

15. (previously presented) A method according to claim 4, wherein the alarm curve which is normalized and changed according to the operating parameters forms an envelope curve over the normalized frequency spectrum of the object to be tested in a fault-free normal condition, wherein an alarm is generated if at least one amplitude value of the normalized frequency spectrum lies outside the envelope curve.

Claims 16 – 17 (cancelled)

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18. (currently amended) A method for evaluating a rotating machine, the method comprising:

establishing an alarm curve of vibration amplitude data ~~verses~~versus frequency for a first rotating speed of a rotating machine operating at a first load value;

gathering actual vibration amplitude data ~~verses~~versus frequency from the rotating machine at a second rotating speed different than the first rotating speed and at a second load value different than the first load value;

normalizing the actual vibration amplitude data ~~verses~~versus frequency to the first rotating speed;

adjusting the alarm curve to account for the difference between the first and second load values; ~~and~~

establishing the alarm curve for a first temperature;

gathering the actual vibration amplitude data versus frequency at a second temperature different from the first temperature;

further adjusting the alarm curve to account for the difference between the first and second temperatures; and

comparing the normalized data and the adjusted alarm curve to evaluate the rotating machine.

Claim 19 (cancelled)